

CLAIMS

1. A mote system comprising:
at least one of an antenna signal generation unit or an antenna signal detection unit; and
a directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit.
2. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:
a beam-forming antenna system.
3. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:
a beam-steering antenna system.
4. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:
a switched-beam antenna system.
5. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:
a horn antenna system.

6. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

one or more electromagnetic reflectors of one or more shapes corresponding to one or more selected antenna patterns.

7. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

an adaptive-antenna system.

8. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

a Yagi antenna.

9. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

a log-periodic antenna.

10. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

a parabolic antenna.

11. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

an array antenna.

12. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

a horn antenna.

13. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

a biconical antenna.

14. The mote system of Claim 1, wherein said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit further comprises:

an antenna steering unit.

15. The mote system of Claim 14, wherein said antenna steering unit further comprises:

an electro-mechanical system.

16. The mote system of Claim 14, wherein said antenna steering unit further comprises:

a micro-electro-mechanical system.

17. The mote system of Claim 14, wherein said antenna steering unit further comprises:

an electromagnetic system.

18. The mote system of Claim 1, further comprising:

a mote having said directional antenna system operably coupled with said at least one of an antenna signal generation unit or an antenna signal detection unit.

19. The mote system of Claim 18, further comprising:
at least one of an animate or inanimate unit in physical contact with said mote
having said directional antenna system operably coupled with said at least one of an
antenna signal generation unit or an antenna signal detection unit.

20. A mote method of using comprising:

distributing a mote, the mote having

(i) at least one of an antenna signal generation unit or an antenna signal detection unit, and

(ii) a directional antenna system operably couplable with said at least one of an antenna signal generation unit or an antenna signal detection unit.

21. The mote method of Claim 20, wherein said distributing a mote further comprises:

emplacing at least one of an animate or inanimate unit in physical contact with the mote.

22. The mote method of Claim 21, wherein said emplacing at least one of an animate or inanimate unit in physical contact with the mote further comprises:

positioning an inanimate component in physical contact with the mote.

23. The mote method of Claim 21, wherein said emplacing at least one of an animate or inanimate unit in physical contact with the mote further comprises:

positioning an animate component in physical contact with the mote.

24. A mote method of making comprising:
forming a mote body; and
emplacing a directional antenna proximate to the mote body.

25. The mote method of Claim 24, wherein said forming a mote body further comprises:
forming at least a part of the mote body from a substrate.

26. The mote method of Claim 24, wherein said emplacing a directional antenna proximate to the mote body further comprises:
forming at least a part of the directional antenna from a substrate.

27. The mote method of Claim 24, wherein said emplacing a directional antenna proximate to the mote body further comprises:
affixing at least a part of the directional antenna to the mote body.

28. A mote method comprising:
integrating a directional antenna proximate to a mote body with at least one of an animate or inanimate unit.

29. The mote method of Claim 28, wherein said integrating a directional antenna proximate to a mote body with at least one of an animate or inanimate unit further comprises:

at least one of affixing the mote body to or encasing the mote body in an inanimate structural component.

30. The mote method of Claim 28, wherein said integrating a directional antenna proximate to a mote body with at least one of an animate or inanimate unit further comprises:

at least one of affixing the mote body to or encasing the mote body in an animate structural component.